



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|--------------------------------|---------------------|------------------|
| 10/810,763 | 03/26/2004 | Robert Roberts | 04-5502 | 7651 |
| 39820 | 7590 | 09/27/2005 | | |
| EDWARD M. LIVINGSTON, PA 963 TRAIL TERRACE DRIVE NAPLES, FL 34103 | | EXAMINER STAICOVICI, STEFAN | | |
| | | ART UNIT 1732 | | PAPER NUMBER |

DATE MAILED: 09/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|-------------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/810,763 | ROBERTS, ROBERT | |
| | Examiner Stefan Staicovici | Art Unit 1732 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 19 May 2005.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) _____ is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 62-106 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

| | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed May 19, 2005 has been entered. Claims 62-106 are pending in the instant application.

Specification

2. The amendment filed May 19, 2005 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material that is not supported by the original disclosure is as follows: the entire amendment.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 92-96, 101-106 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 92-95, 101 and 105, the multiple dependencies are unclear as to which limitations Applicants is referring.

Regarding claim 96, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

In regard to claims 102-103, dependent claim 62 is a process claim and not a product claim as Applicant states.

Claim 104 appears to be a Jepson claim, but is not written in a Jepson format. Further, the improvement claimed is open-ended and it is unclear as to which reference value Applicant is referring.

Claim 106 states "excellent" resistance, but it is unclear what "excellent" implies. Further clarification is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 62-68, 70-84, and 90-102 are rejected under 35 U.S.C. 102(b) as being anticipated by Roberts (US Patent No. 3,556,161).

With regard to claims 62 and 71-72, Roberts ('161) teaches the claimed process of processing colloidal size polytetrafluoroethylene resin particles to produce biaxially-oriented

(column 1, lines 15-17) structures including, mixing PTFE powder having a particle size of 5-700 microns and a solvent to form a dispersion, releasing said PTFE particles by compaction to form a pressure-coalescible composition, filtering said composition to retain liquid of about 16% (approximately 17-20%) and form a cake, extruding said cake and applying a means of stress (column 8, line 32) at approximately 90° to the original extrusion direction (column 8, lines 39-42).

With regard to claim 63 and in further regard to claim 71, Roberts ('161) teaches the means of applying stress is rolling (column 8, Lines 40-41).

With regard to claim 64 and in further regard to claim 72, Roberts ('161) teaches the means of applying stress is calendaring (column 16, lines 33-37).

With regard to claim 65, Roberts ('161) teaches means of applying stress is blowing (column 1, lines 54-56).

With regard to claim 66, Roberts ('161) teaches means of applying stress is extrusion (column 10, lines 1-10).

With regard to claims 67-68, Roberts ('161) teaches a biaxially-oriented polytetrafluoroethylene sheet or tube made from uniaxially-oriented (column 8, line 32) past extrusion extrudate in the hydrostatic pressure coalescible state (column 9, lines 55-71) produced by applying a means of stress in that extrudate 90 degrees to the original extrusion direction (column 8, lines 39-42).

With regard to claims 71-75 and 78, Roberts ('161) teaches the sheet contains particulate additive less than 25 microns in size (column 12, lines 25-27), said additive being additive is carbon black (inert) with 0.05 micron particle size.

With regard to claims 70 and 76-77 and, in further regard to claims 71-72, Roberts ('161) teaches filler up to 95% by volume (see col. 1, lines 65-67) having a dimension of at least 20 microns see col. 2, lines 11-14).

With regard to claims 79-81, Roberts ('161) teaches polymeric resin additives (see col. 4, lines 35-27).

With regard to claims 82-84 Roberts ('161) teaches laminating a plurality of sheets and heating to 360-380 °C.

With regard to claim 90, Roberts ('161) teaches applying heat up to 300 °C to plasticize and assist the forming and shaping the hydrostatic pressure coalescible biaxially-oriented structures (column 7, lines 1-13, heat to 250 degrees C).

With regard to claim 91, Roberts ('161) teaches drying and sintering at 360-390 °C (see col. 7, lines 22-26).

With regard to claims 92-95, Roberts ('161) teaches drawing a sheet and forming in a cavity under fluid pressure (see col. 8, line 69 through col. 9, line 5).

With regard to claims 96-101, Roberts ('161) teaches incorporating two or more types of a removable filler, *i.e.*, carbon black or polymeric resin, wherein the size of said filler determines the final porosity and wherein said filler is removed at high temperature sintering (see col. 3, line 63 through col. 4, line 50).

With regard to claim 102, Roberts ('161) teaches a product having the same tensile strength in all directions (see col. 10, lines 5-20).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 69, 85-89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts (US Patent No. 3,556,161).

Roberts ('161) teaches the basic claimed process as described above.

Regarding claim 69, it is noted that it is well known to cut and cylinder in order to from a sheet as an equivalent alternative to forming a sheet directly. Therefore, it would have been obvious for one of ordinary skill in the art to have cut a cylinder in order to form a sheet in the process of Roberts ('161) as an equivalent alternative to forming a sheet directly because it provides for reduced expenditure in purchasing additional compression molding equipment when having only an extruder, hence providing increased versatility of existing molding equipment.

Regarding claims 85-89, although Roberts ('161) teaches laminating a plurality of sheets at a temperature, Roberts ('161) does not teach a specific laminating temperature and pressure. It is submitted that the laminating temperature and pressure are result effective variables. Therefore, it would have been obvious for one of ordinary skill in the art to have used routine

Art Unit: 1732

experimentation in the process of Roberts ('161) to determine an optimum pressure of 100-1000 psi and an optimum temperature of 300 °C because it is submitted that the laminating temperature and pressure are result effective variables which can be readily optimized.

In regard to claims 103-106, it is submitted that because Roberts ('161) teaches the same materials and the same process that the resulting product will have the same properties such as bursting strength, tensile strength as claimed in the instant invention.

Response to Arguments

9. Applicant's arguments filed May 19, 2005 have been considered.
10. In response to applicant's argument that Roberts ('161) fails to show that "the lamellae are not present in the end product of the present invention," (see page 1 of the remarks filed 5/19/2005) it is noted that the features upon which applicant relies are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).
11. Applicant argues that the "processing method of the '161 patent requires multiple calendaring steps," whereas "the end product of the present invention is produced by eliminating multiple calendaring steps" (see page 2 of the remarks filed 5/19/2005). In response it is noted that under MPEP §2111.03, the "transitional term 'comprising'... is inclusive or open-ended and does not exclude additional, unrecited elements or method steps." See, e.g., Invitrogen Corp. v. Biocrest Mfg., L.P., 327 F.3d 1364, 1368, 66 USPQ2d 1631, 1634 (Fed. Cir. 2003).

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stefan Staicovici, Ph.D. whose telephone number is (571) 272-1208. The examiner can normally be reached on Monday-Friday 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael P. Colaianni, can be reached on (571) 272-1196. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stefan Staicovici, PhD



Primary Examiner

9/23/05

AU 1732

September 23, 2005